

ABSTRACT

A duct interconnecting two channels in a fuel-cell flowfield is disclosed. In use, responsive to a flow velocity differential as between the two channels, reaction product water (in the case of a PEM fuel cell) is drawn from one channel to the other via the duct so as to aid in the removal of reaction product accumulations in one or the other of the channels. Each of the two channels may have an associated flow-velocity-increasing means (such as an in-line venturi) associated with each end of the duct. Depending on the location of the duct within a flowfield, the duct may also help to maintain a desired pressure drop and flow of reactant gas along each channel, which helps propel excess water along the channels, and, when the oxidant is oxygen in air, helps prevent localized oxygen depletion.

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